RECEIVED
CENTRAL FAX CENTER
JUN 0 8 2007

Application No. 10/064,129 RD-28679-1
Reply to Office Action of March 9, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-8. (cancelled)

9. (currently amended) A phosphor blend comprising $(Lu,La,Gd)_x(Al,Ga)_yO_{12}:Ce^{3+}$ or $(Tb,Y,Lu,La,Gd)_xGa_yO_{12}:Ce^{3+}$, wherein x is in a range from about 2.8 to and including 3 and y is a range from about 4 to and including 5, and at least ~~another~~ one phosphor selected from the group consisting of $(Gd,La,Lu,Sc)_2O_3:Eu^{3+}$, $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$, $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$, $(Ba,Sr,Ca)(Y,Gd,La,Lu)_2O_4:Eu^{3+}$, $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$, $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$, and $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^{3+}$, and at least one additional phosphor selected from the groups: (a) $(Ba,Sr,Ca)_5(PO_4)_3(F,OH):Eu^{2+}$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, and $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; (b) $BaTiP_2O_8$ and $Ba_5(PO_4)_3(Cl,F,OH):Sb^{3+}$; and (c) $GdMgB_5O_{10}:Tb^{3+}$; ~~and (d) $(Gd,La,Lu,Sc)_2O_3:Eu^{3+}$, $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$, $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$, $(Ba,Sr,Ca)(Y,Gd,La,Lu)_2O_4:Eu^{3+}$, $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$, $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$, and $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^{3+}$~~ wherein said phosphor blend is capable of absorbing EM radiation having wavelengths in a range from about 200 nm to about 400 nm and emitting light in having wavelengths in a visible spectrum.

10. (cancelled)

11. (previously presented) The phosphor blend of claim 9, wherein said phosphor blend absorbs EM radiation substantially in a wavelength range from about 250 nm to about 300 nm.

12. (original) The phosphor blend of claim 11, wherein said white light has color coordinates substantially on a black body locus of a CIE chromaticity diagram.

PAGE 3/9 * RCVD AT 6/8/2007 1:21:54 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/14 * DNIS:2738300 * CSID:518 387 7751 * DURATION (mm-ss):08-08

13. (original) The phosphor blend of claim 11, wherein said color coordinates of said white light is represented by a point at a distance less than or equal to about 0.0054 from a black body locus of a CIE chromaticity diagram.

14. (original) The phosphor blend of claim 9, wherein said light emitted from said phosphor blend is white light.

15. (original) The phosphor blend of claim 9, wherein y is in a range from about 4.5 to and including 5.

16. (original) The phosphor blend of claim 9, wherein y is in a range from about 4.6 to and including 5.

17. (currently amended) A phosphor blend comprising a plurality of phosphors, each of said phosphors being selected from one of groups: (a) $(Ba,Sr,Ca)_5(PO_4)_3(F):Eu^{2+}$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, and $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; (b) $BaTiP_2O_8$, and $Ba_5(PO_4)_3(Cl,F,OH):Sb^{3+}$; (c) $(Lu,La,Gd)_x(Al,Ga)_yO_{12}:Ce^{3+}$ or $(Tb,Y,Lu,La,Gd)_xGa_yO_{12}:Ce^{3+}$, wherein x is a range from about 2.8 to and including 3 and y is in a range from about 4 to and including 5, and $(Ba,Sr,Ca)_5(PO_4)_3(F,OH):Eu^{2+},Mn^{2+},Sb^{3+}$; and $Ba_5(PO_4)_3(Cl,F,OH):Mn^{2+},Sb^{3+}$ and (d) $(La,Lu,Sc)_2O_3:Eu^{3+}$, $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$, $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$, $(Ba,Sr,Ca)(Y,Gd,La,Lu)_2O_4:Eu^{3+}$, $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$, $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$, $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^{3+}$, and $GdMgB_5O_{10}:Ce^{3+},Mn^{2+}$; wherein at least two of said phosphors are selected from different groups, at least one of said phosphors is selected from group (d), and said phosphor blend is capable of absorbing EM radiation having wavelengths in a range from about 200 nm to about 400 nm and emitting light in having wavelengths in a visible spectrum.

18. (cancelled)

19. (original) The phosphor blend of claim 17, wherein y is in a range from about 4.6 to and including 5.

20-23 (cancelled)

PAGE 4/9 * RCVD AT 6/8/2007 1:21:54 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/14 * DNIS:2738300 * CSID:518 387 7751 * DURATION (mm-ss):08-08

24. (currently amended) A phosphor blend comprising phosphors each of said phosphors being selected from one of groups: (a) $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, and $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; (b) $GdMgB_5O_{10}:Tb^{3+}$, (c) $(Lu,La,Gd)_x(Al,Ga)_yO_{12}:Ce^{3+}$ $(Tb,Y,Lu,La,Gd)_xGa_yO_{12}:Ce^{3+}$, and $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$ and $(Ba)_5(PO_4)_3(Cl,F,OH):Mn^{2+}$, Sb^{3+}; and (d) (La,Lu, $Sc)_2O_3:Eu^{3+}$, $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$, $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$, $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$, and $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^{3+}$; wherein x is in a range from about 2.8 to and including 3, y is in a range from about 4 to and including 5, at least two phosphors are selected from different groups, at least one phosphor is selected from group (d), and said phosphor blend is capable of absorbing EM radiation having wavelengths in a range from about 200 nm to about 400 nm and emitting light having wavelengths in a visible spectrum.

25. (previously presented) The phosphor blend of claim 24, wherein y is in a range from about 4.6 to and including 5.

26-28. (cancelled)

29. (previously presented) A phosphor blend comprising phosphors, each of said phosphors being selected from one of groups: (a) $(Ba,Sr,Ca)_5(PO_4)_3(F):Eu^{2+}$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, and $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; and (b) $(Tb,Y,Lu,La,Gd)_x(Al,Ga)_yO_{12}:Ce^{3+}$ and $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+},Mn^{2+},Sb^{3+}$; wherein x is in a range from about 2.8 to and including 3, y is in a range from about 4 to and including 5, at least two phosphors are selected from different groups, and said phosphor blend is capable of absorbing EM radiation having wavelengths in a range from about 200 nm to about 400 nm and emitting light in having wavelengths in a visible spectrum.

30. (previously presented) A phosphor blend comprising phosphors, each of said phosphors being selected from one of groups: (a) $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, and $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; (b) $(Tb,Y,Lu,La,Gd)_x(Al,Ga)_yO_{12}:Ce^{3+}$ $(Tb,Y,Lu,La,Gd)_xGa_yO_{12}:Ce^{3+}$ $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$ and $Ba_5(PO_4)_3(Cl,F,OH):Eu^{2+},Mn^{2+},Sb^{3}$; wherein x is

PAGE 5/9 * RCVD AT 6/8/2007 1:21:54 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/14 * DNIS:2738300 * CSID:518 387 7751 * DURATION (mm-ss):08-08

in a range from about 2.8 to and including 3, y is in a range from about 4 to and including 5, at least two phosphors are selected from different groups, and said phosphor blend is capable of absorbing EM radiation having wavelengths in a range from about 200 nm to about 400 nm and emitting light in having wavelengths in a visible spectrum.

31. (previously presented) The phosphor blend of claim 30, wherein y is in a range from about 4.6 to and including 5.

32. (cancelled)

33. (currently amended) A light source comprising:

(a) a source of gas discharge; and

(b) a phosphor blend comprising at least two phosphors, each of said phosphors being selected from one of groups: (1) $(Ba,Sr,Ca)_5(PO_4)_3(F,OH):Eu^{2+}$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, and $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; (2) $BaTiP_2O_8$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, Mn^{2+}, and $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Sb^{3+}$; (3) $GdMgB_5O_{10}:Tb^{3+}$, and (4) $(LuLa,Gd)_x(Al,Ga)_yO_{12}:Ce^{3+}$, $(Tb,Y,LuLa,Gd)_xGa_yO_{12}:Ce^{3+}$ and $Ba_5(PO_4)_3(F,OH):Mn^{2+}$, Sb^{3+}. and $(Ba,Sr,Ca)_5(PO_4)_3(F,OH):Eu^{2+}$ and $(Ba)_5(PO_4)_3(Cl,F,OH):Mn^{2+}$, Sb^{3+}; and (5) $(Gd,La,Lu,Sc)_2O_3:Eu^{3+}$, $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$, $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$, $(Ba,Sr,Ca)(Y,Gd,La,Lu)_2O_4:Eu^{3+}$, $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$, $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$ and $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^3$; wherein x is in a range from about 2.8 to and including 3, y is in a range from about 4 to and including 5, at least two phosphors are selected from different groups, at least one phosphor is selected from group (5), and said phosphor blend is capable of absorbing EM radiation that is emitted by said source of gas discharge and has wavelengths in a range from about 200 nm to about 400 nm and emitting light in having wavelengths in a visible spectrum.

34. (previously presented) The light source of claim 33, wherein y is in a range from about 4.6 to and including 5.

PAGE 6/9 * RCVD AT 6/8/2007 1:21:54 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/14 * DNIS:2738300 * CSID:518 387 7751 * DURATION (mm-ss):08-08

35-52. (cancelled)

53. (currently amended) A light source comprising:

(a) a source of gas discharge; and

(b) phosphor blend comprising phosphors, each of said phosphors being selected from one of groups: (1) $(Ba,Sr,Ca)_5(PO_4)_3(F,OH):Eu^{2+}$, $(Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$, and $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; (2) $(Lu,La,Gd)_x(Al,Ga)_yO_{12}:Ce^{3+}$, $(Tb,Y,Lu,La,Gd)Ga_yO_{12}:Ce^{3+}$, $(Ba,Sr,Ca)_5(PO_4)(F,OH):Eu^{2+}$, $Ba_5(PO_4)_3(Cl,F,OH):Mn^{2+},Sb^{3+}$; and (3) $(La,Lu,Sc)_2O_3:Eu^{3+}$, $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$, $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$, $(Ba,Sr,Ca)(Y,Gd,La,Lu)_2O_4:Eu^{3+}$, $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$, $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$ and $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^3$, wherein x is in a range from about 2.8 to and including 3, y is in a range from about 4 to and including 5, at least two phosphors are selected from different groups, at least one phosphor is selected from group (3), and said phosphor blend is capable of absorbing EM radiation having wavelengths in a range from about 200 nm to about 400 nm and emitting light in having wavelengths in a visible spectrum.

54. (previously presented) The light source of claim 53, wherein y is in a range from about 4.6 to and including 5.

55-84. (cancelled)

PAGE 7/9 * RCVD AT 6/8/2007 1:21:54 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/14 * DNIS:2738300 * CSID:518 387 7751 * DURATION (mm-ss):08-08